

NORTHWOODS JOURNAL – OCTOBER 2021

A Free Publication about Enjoying and Protecting Marinette County’s Outdoor Life

In This Issue:

International Bat Week	1
Leaf Colors in Tree Families	2
Simple Stone Activities for Kids	3
October Phenology	3
Marinette County Fall Color Tour	4
European Frogbit Invasive Species Alert Reminder	4
Peshtigo Marks 150 th Anniversary of the Great Peshtigo Fire	5
DNR to Monitor CWD Samples in Northeastern Wisconsin	6
UWGB-Marinette Lifelong Learning Institute Partners with T.O.A.D.	6
Tips to Attract More Birds This Fall	7
Cleaning Birdfeeders & Making the Most of Fall Birding in the Great Lakes	8
Outdoor Hazards in WI Guide	8
County Parks Department News	9
Reducing Algae Blooms	10
County Parks Halloween Events	10
How to Mulch & Avoid Mistakes	11
‘Ask a Master Gardener’ Event	12
Lights Out for Birds During Migration	12
October Meteor Showers	13
Fun Fall Crafts for You!	14
Meet the ‘Chipper’ Chipmunk	14



Baby fruit bats at an Australian wildlife rehabilitation clinic



Holy Flying Mammals, Batman! Bat Week is October 24 – 31!

<https://batweek.org/> & <https://dnr.wisconsin.gov/topic/WildlifeHabitat/Bats>



Bat Week is an international, annual celebration designed to raise awareness about the need for bat conservation. Bats are amazing creatures that are vital to the health of our natural world and economy. Although we may not always see them, bats are hard at work all around the world each night - eating tons of insects, pollinating flowers, and spreading seeds that grow new plants and trees.



Humans need bats. Worldwide, there are more than 1,400 species of bats - that’s almost 20 percent of all mammal species. Bats live almost everywhere on Earth except the most extreme desert and polar regions. So, no matter where you live, it is almost certain that there are bats living near you. Bats are amazing animals that are vital to the health of our environment and economy. Most bats in North America eat insects, including moths, beetles, aquatic insects, and flies. Eating all these insects helps protect our food crops and forests from insect pests, saving farmers and forest managers billions of dollars each year.



Bats are a vital part of many ecosystems. They are pollinators and seed-disperser for many plants. Bats are major consumers of agricultural and forest pests, and as predators of biting insects. Bats also play an important role in reducing risks of insect-borne diseases such as West Nile Virus. Cave bat populations in Wisconsin have been in rapid decline since 2014 due to the discovery of a devastating fungal disease that causes extensive mortality in cave-dwelling bats.

The fungal disease was first discovered in New York in 2006, has spread across the U.S. and reached Wisconsin in 2014. The fungal disease, known as white-nose syndrome (WNS), has caused the most precipitous decline of North American wildlife in recorded history. Since it was discovered, WNS has affected many species

of cave-hibernating bats in the U.S. and Canada, causing declines approaching 100% in some populations. WNS poses a severe threat to all four of Wisconsin’s cave bat species: big brown bat, little brown bat, northern long-eared bat (below, with WNS on nose) and eastern pipistrelle.



Consider these fascinating bat facts:

- Bats come in all shapes and sizes, from the tiny, adorable bumblebee bat that weighs less than a penny to the big, beautiful flying foxes that can have a wingspan of up to six feet.
- Bats are the only mammal that can truly fly (although some other mammals “glide”). A bat’s wing is actually a modified hand—similar to yours.
- Contrary to popular belief, bats actually have good eyesight (similar to that of humans), but for most species, their main technique for navigating or locating prey is using echolocation (not all species echolocate!); emitting very high- pitched sounds that bounce off obstacles in their path, like trees, other bats, buildings, and food. main target—delicious insects. Not all bats that echolocate are insectivores!
- Bats eat lots of different things. Although almost 70% of bat species feed primarily on insects, some bats are carnivorous, eating meat like rodents, frogs, and fish. Only three species of bats feed on animal blood, with two of these species specializing on bird blood. Many other bats eat pollen, nectar or fruit—these bats are vital for pollinating flowers and spreading seeds that grow new plants and trees.



Continued next page

Learning Leaf Colors Unique to Tree Families

<https://www.treehugger.com/learning-leaf-colors-unique-tree-families-1342823>



Certain broadleaf trees can be uniquely identified by their brilliant fall leaf color. In some cases, a tree's common name is derived from its primary autumn leaf color, such as red maple and yellow poplar. The most common leaf colors of fall are red, yellow, and orange. Some tree species can express several of these colors simultaneously as the season progresses.

How Fall Leaf Color Develops

All leaves start out in summer as green. This is because of the presence of a group of green pigments known as chlorophyll. When these green pigments are abundant in the leaf's cells during the growing season, they mask the color of any other pigments that may be present in the leaf.

Chlorophyll in the leaves is the tree's main means of producing nutrients during the summer. But with autumn comes the destruction of chlorophyll. This demise of the green pigments allows other, previously masked colors to come forward. Those unmasked fall colors quickly become markers for individual deciduous tree species.

The two other pigments present in leaves are:

- Carotenoid (produces yellow, orange, and brown)
- Anthocyanin (produces red)



Trees With Red Leaves

Red is produced by warm, sunny fall days and cool fall nights. Leftover food in the leaf is transformed into the color red through anthocyanin pigments. These red pigments also color cranberries, red apples, blueberries, cherries, strawberries, and plums. Some maples, sweetgum, and oaks have red fall leaves. Dogwoods, black tupelo trees, sourwood trees, persimmons, and some sassafras trees also have red leaves.



Staghorn sumac, a tree-like shrub, in fall foliage.

Yellow and Orange Shades

Chlorophyll is destroyed with the onset of

autumnal conditions, which reveals the orange and yellow leaf colors, or carotenoid pigments. Deep orange is a combination of the red and yellow color-making process. These yellow and orange pigments also color carrots, corn, canaries, and daffodils, as well as egg yolks, rutabagas, buttercups, and bananas.

Hickory, ash, some maples, the yellow poplar (tulip tree), some oaks (white, chestnut, bear), some sassafras, some sweetgum, beech, birch, and sycamore trees have yellow leaves in the fall.



An oak tree showing off fall colors

Weather's Effect

Some years see more brilliant color displays than others. It all depends on weather conditions. Temperature, the amount of sunlight and how much rain fell all are contributing factors in color intensity and in how long they'll remain.

Low temperatures, but above freezing, are good for reds in maples, but an early frost can hurt a bright red color, according to SUNY College of Environmental Science and Forestry. Overcast days tend to make all colors more intense.

Peak Viewing

The United States and Canada produce a variety of fall foliage colors which has created a tourism industry. Here are peak viewing times in the United States:

- **Late September/ Early October:** New England, upper Minnesota/Wisconsin and the Upper Peninsula of Michigan, Rocky Mountains
- **Mid-, Late October:** Upper Midwest
- **November:** Southwest, Southeast

Some Stay Green

Not all broadleaf trees change colors and drop their leaves in the fall. Found mostly in southern climates, some evergreens broadleaf trees can survive tough winters. Magnolias, some oaks, and myrtles are among them.

The Wisconsin Fall Color Report, at <https://www.travelwisconsin.com/fall-color-report> lets you know what percentage of color is in locations throughout the state. Typically, Marinette County's peak is around the second week of October. Visit here for fall color predictions in the Upper Peninsula of Michigan: <https://www.michigan.org/fallcolormap>.



Bats, continued



Open the kitchen cupboard and what do you see? Maybe a bottle of tequila, some yummy fig jam or maybe a huge block of chocolate. Have you ever wondered how these and many other food items may be connected to bats? Believe it or not, **many of the foods found on grocery store shelves and in kitchen pantries are products of bats' interactions with nature.** Three interactions, to be specific.

Pollination: Take the bottle of tequila, for example. Where does that distilled beverage hail from anyway? Most is made in Mexico, where the lesser-long nosed bat serves as bee substitutes, slurping up the sweet nectar from wild agave. In the process, pollen sticks to their bristled neck and is transferred to the next flower, sometimes many miles away.

Seed dispersal: And what about that fig jam? Before spreading it on your toast consider this: without bats, forests might be bereft of figs trees. There are more than 800 species of figs worldwide and bats play a large role in their dispersal. When bats munch on the juicy chunks of figs they spit out their seeds, or just let them exit the body the 'natural' way (i.e., poop). In any case, their deposits often land in barren forests that use the introduction of new seedlings.

And then there's the chocolate: The cacao. Everyone loves it—including pests. Fortunately for devoted chocolate fans, there are bats. Some bats can eat half their weight in bugs, and by doing so decrease the need for harsh pesticides, and increase crop yields all around. Bats are our new best friend. *Especially* when it comes to food.

Bats are in decline nearly everywhere they are found. These amazing animals face a multitude of threats including habitat loss, pesticide use, destruction of roost sites, over-harvesting for bush-meat, climate change, and much more. Worldwide, about 24% of bats are considered critically endangered, endangered, or vulnerable. Bat numbers in the United States and Canada have declined dramatically as a new disease, White-Nose Syndrome (WNS), has killed over six million bats in just eight years.

Resources & more information about bats:

<https://www.batcon.org/> - Bat Conservation International organization

<https://dnr.wisconsin.gov/topic/WildlifeHabitat/Bats>

<https://wiatri.net/inventory/bats/aboutBats/pdf/batsOfWisc.pdf> - The Wisconsin Aquatic and Terrestrial Resources Inventory

<https://wiatri.net/inventory/bats/news/pdf/2021FebEcholocator.pdf>

<https://www.fws.gov/midwest/endangered/mammals/inba/> - Indiana bat information



10+ Simple and Beautiful Stone Activities for Kids

<https://littlepinelearners.com/10-simple-and-beautiful-stone-activities-for-kids/>



Here you will find 10+ stone themed nature crafts, literacy and other learning activities! These unique and creative activities are irresistible and I promise you will find a handful to try with your little rock hound!

1. A Simple Mummy Stone Craft

These [mummy rocks](#) are not only a wonderful Halloween nature craft, but would make a great spooky bonfire or camping activity! Get the details one of the cutest stone crafts [here](#).

2. A Simple Stone Activity to Try Today

This one is a HUGE hit! This [simple stone puzzle](#) is easy to set up but will keep your little ones busy for a while! Get the details [here](#).

3. Practicing Prewriting Skills with Sticks and Stones

Have you ever [“painted” with water on stones](#) before?! The water brings out the beautiful colors in the stones and it looks so pretty! It’s a super calming activity and great for fine motor skills! Get the details [here](#).

4. A New Way to Use Story Stones

If you’ve been following our blog for a while now then you now that we love story stones! They are an incredibly beautiful aid for storytelling and writing. For more about story stones, visit <https://littlepinelearners.com/a-new-way-to-use-story-stones/>.



5. Reverse Sequin Nature Stone Craft

This [rock craft](#) makes the perfect homemade Valentine’s Day gift or calm down tool. The beautiful reversible sequins look stunning against the rocks and they are so soothing to play with. Get the details on one of the best Valentine’s day stone crafts [here](#).



6. Loose Parts Stones

Try to look at these and not smile! It’s impossible!) Set out stones, other pieces of nature and googly eyes in a divided tray and see what adorable creations your kids come up with! No glue required here. This transient art activity allows for endless creations.

7. Wikki Stix and Stones- A Must Try Activity

This activity is so incredibly simple to set up! Literally put out a pack of [Wikki Stix and rocks](#) and see what pretty creations your kids come up with. Yes, they stick to the rock and peel off very easily! Get the details [here](#).

8. Beaded Bug Stones

This adorable beaded bug craft comes from my [25+ Nature Inspired Summer Activities for Kids](#) post. There are actually four stone activities on this post (#1, #7, #21 and #23) Get the details [here](#).

9. Easter Egg Stacking Rocks

These [easter egg stacking rocks](#) quickly became a tradition in our home. Every April we search for large, flat stones to turn into gorgeous stacking rocks! The process is really fun and they turn out beautiful every time! Get the details for one of our favorite stone crafts [here](#).

10. Stick and Stone Constellations

These [stick and stone constellations](#) are such a simple activity to set up! Just put star stickers on stones, collect some sticks and you are all set to make your very own constellations. Get the details [here](#).

11. Collecting Rocks

I’m saving a classic activity for last! Have you ever used an egg carton to collect rocks? Those little indents make for the perfect spot for collecting, sorting and playing with rocks! You can find the printable along with other wild activities to go with the label [here](#).



October Phenology!

<https://www.eekwi.org/october-phenology>



Phenology is the study of cyclic and seasonal natural phenomena, especially in relation to climate and plant and animal life.

- Watch for the endangered [whooping cranes](#) to begin migrating towards Chassahowitzka National Wildlife Refuge, in Florida.
- Coho and Chinook salmon are on the move, see them at Kewaunee at the C.D. Besadny Fish and Wildlife Area.
- The first frost kills mosquitoes and katydids, grasshoppers and crickets stop calling.
- Muskrats and [beaver](#) are busy building lodges, gathering food, and preparing for winter.
- [Red-winged blackbirds](#) form large flocks
- [Fall leaves](#) on deciduous trees turn brilliant colors before they are plucked by the wind and float to the ground. [Tamarack](#) needles also turn gold before dropping off.



- Black walnuts fall from the trees and look like green tennis balls in the grass. Squirrels fill their mouths with them to store for a winter treat.
- [Amphibians](#) and [reptiles](#) hibernate for the winter.
- [Cattails](#) explode with seeds in the fall. They float away like parachutes in the wind.
- [Snowshoe hares](#) are turning from brown to white, getting ready for snowfall.
- [Ducks](#), [Canada geese](#), [woodcock](#), and snipe are on the move, migrating south. Watch for winter visitors from Canada like the [dark-eyed junco](#) and white-throated sparrow.



- [Milkweed](#) pods open for their seeds to parachute away in the wind.
- The Big Dipper is at the lowest point in the sky.

For more: <https://www.aldo Leopold.org/teach-learn/phenology/>



Northwoods Journal Online

Want to read issues of the *Northwoods Journal* online? Go to www.marinettecounty.com and search for “Northwoods Journal”. We can also send you an e-mail reminder when each new issue is posted online, or you can get a copy mailed to you. Contact Anne Bartels, Information & Education Specialist at 715-732-7784 or email abartels@marinettecounty.com.

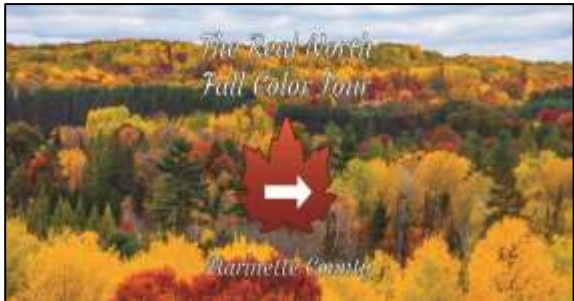
Marinette County Fall Color Tour is Back!

Saturday, September 25th - Sunday, October 24th

<https://www.therealnorth.com/pages/fall-colors/>



As the days get shorter and the nights turn cool, trees have begun their brilliant seasonal transformation to unique shades of red, yellow and orange. Wrap yourself in a blanket of fall hues as you drive through Marinette County's canopied roadways and colorful sights. Choose between three individual routes, each with unique stops along the way...



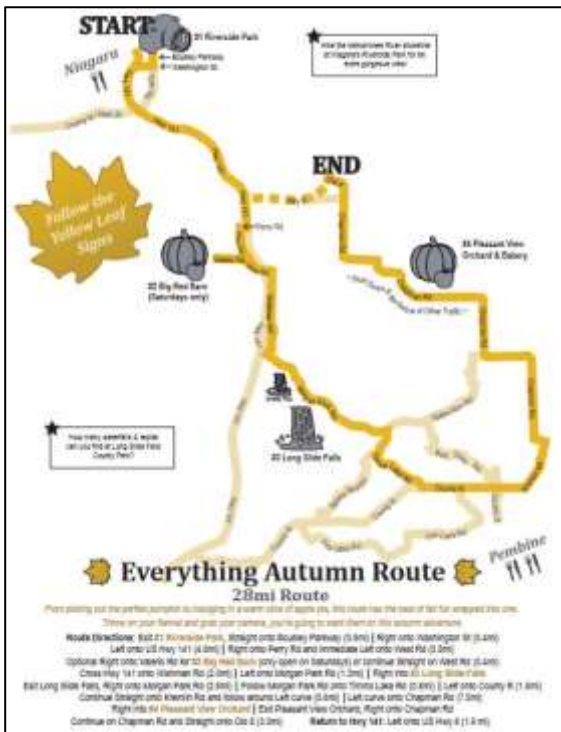
Wine, Cheese and Wildlife Route
The 70-mile Wine, Cheese and Wildlife Tour begins at US 141 and County M in Coleman, where guests can shop the Front Porch Market (Mon.-Sat.) for tasty Wisconsin cheese. Follow the southern Marinette County route to admire a rustic canopied road, watch for wildlife in the hardwood lined fields and hike the Prairie Trail at Harmony Arboretum. Stop for wine at Forgotten Fire Winery then drive the Green Bay shoreline to conclude the tour in the City of Marinette, which boasts a number of shopping and dining options.

[Download Green Route Map](#)

Everything Autumn Route

Experience All Things Autumn on this 28-mile route, beginning at Riverside Park in the city of Niagara. Savor the magical aroma of fall with a one-mile hike on the Riverside Trail system along the beautiful Menominee River. As the tour descends south, stop for pictures at the Niagara bluffs and the photo booth at Long Slide County Park. Hike the natural shore of the Pemebonwon River to see how many waterfalls and rapids you can find. Complete your autumn experience with a stop at Pleasant View Orchard for crisp apples and a fresh bakery.

[Download Yellow Route Map](#)



Waterfall Route

The WaterFall Tour begins at Dave's Falls, just off Highway 141 near Amberg, heads west to Strong Falls inside Goodman Park and south down scenic Rustic Road 32 to McClintock Rapids. The tour continues south to Thunder Mountain Overlook where guests can hike the

trails and take pictures with harvest décor arranged throughout the park. The final stop on the tour is nearby Veteran's Falls. In addition to the county parks, the 141 Overlook is included near the start of the route between Wausaukee and Amberg. Stops on the scenic 65-mile route provide visitors with the opportunity to hike trails, enjoy the waterfalls up close and explore the mature hardwood beauty of each park.

[Download Red Route Map](#)



Route Maps will also be available at local businesses throughout Marinette County.

[Mail Me a Map](#)

** Some routes involve Marinette County Parks which require a parking pass. You can purchase a day pass (\$5/vehicle - cash only) at any park.*

*** Not all restaurants & retailers are open daily, check hours for availability.*



For more information or to contact the Tourism office, call 715-732-7473 or [click here to email](#).



See page 2 for more about fall colors in trees and for more links about viewing fall colors!

European Frog-bit Alert - Fall AIS Reminder

By Austin Banaszak – Conservation Generalist, Land Information Department

As the fall leaves begin to change, many outdoorsmen and women are getting the familiar itch to get outside. Northeastern Wisconsin offers tremendous opportunity to pursue many forms of fish & game recreation throughout the fall season.

Unfortunately, some Wisconsin waterways have been reported to carry several species of invasive aquatic species (AIS) that are harmful to the ecosystem. County Conservationists and the Department of Natural Resources have been working to control the spread of these species. AIS can spread naturally through forces like wind, current and high-water levels. However, our focus is preventing the manual spreading of AIS by following easy decontamination steps.

European Frogbit (*Hydrocharis morsus-ranae*) is an aquatic invasive species of great concern that has been recently reported in Wisconsin's waters. This plant takes the form of a small green floating cluster of plants that appears as multiple miniature lily pads. The green pads are between one and two inches in diameter and sport a three-inch stalk topped with a white flower. These plants grow very aggressively and form an impenetrable floating mat. In proper condition these plants can choke shallow waterways with ease.



This plant was initially discovered in upper Michigan in the Sault Ste. Marie area in 2018. This summer it was discovered in the Green Bay shorelines of northern Oconto County. After further inventory by Marinette County's Land Information Department, it was discovered along the shores of bordering the county and Lake Michigan of Green Bay. Efforts to eradicate the known infestations are underway. Here are some steps in preventing the spread of European frogbit and other aquatic invasive species:

1. Inspect boats, trailers, and equipment.
2. Remove all attached aquatic plants and animals.
3. Drain all water from boats vehicles, and equipment
4. Never move plants, animals or fish into a different waterbody

Special Concern* This invasive species thrives in shallow backwater. Waterfowlers and trappers will inevitably make contact with the plant in shallow areas sought out while pursuing ducks, geese and furbearers. Please take the time to follow these steps with mud boats, skiffs, canoes, kayaks, decoys, traps, waders, boots, and all other equipment used in the backwater. By taking these steps we can work together to improve the aquatic health of our waterways that so many enjoy. We wish you a safe and enjoyable fall season on Wisconsin's waters.



Legacy Forged by Tragedy – Peshtigo Marks 150th Anniversary of the Historic Peshtigo Fire

Excerpts from the Wisconsin Natural Resources Magazine, Fall 2021

https://issuu.com/wisconsinnaturalresources/docs/wnr_fall_2021_singles/s/13284562



The city of Peshtigo adopted its name from the Peshtigo River, which passes through the heart of this northeast Wisconsin community. Rewind to Oct. 8, 1871, and the only thing passing through Peshtigo's streets was a sinister fire that claimed more than 1,000 lives in the city and scorched over 1.2 million acres of land, all told.

Despite being overshadowed by the Great Chicago Fire, which took place simultaneously, the Peshtigo Fire was far more deadly. The three-day Chicago conflagration accounted for about 300 deaths, making the Peshtigo Fire the deadliest in American history.

There are multiple accounts of what ignited this fire, but the exact cause remains speculative. During that particular year, the forests of Wisconsin and the Upper Peninsula of Michigan had faced a great drought, leading to arid conditions. Peshtigo had not seen any significant rain in months.



Part of what made the sweeping fire so deadly was the speed at which it traveled as it raged through Wisconsin and Michigan. On that fateful Sunday, a perfect storm of elements collided to create hurricane-force winds. The air currents contributed to 100 mph winds that rapidly spread the fire.

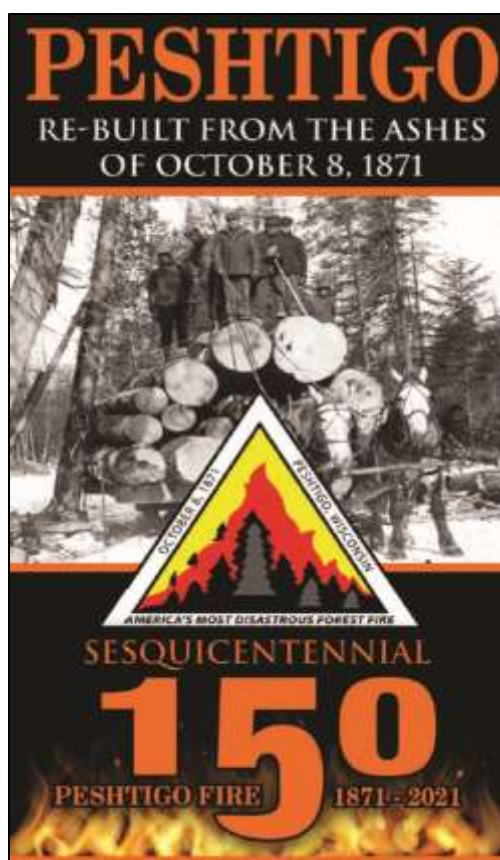
At the time, Peshtigo had established itself as a lumber-producing city. Tragically, the city's wooden architecture served as a conductor for the blazing flames.



A mural on display at the Peshtigo Fire Museum depicts the raging fire that claimed more than 1,000 lives in the city - Peshtigo Historical Society.

Peshtigo's population then was approximately 1,700 residents, none of whom were aware of

the devastation to come. There was no time to evacuate and certainly no time to call for help. The heat from the embers was so tremendous that being exposed meant almost instantaneous death. For many, the closest refuge from the lurking flames was the river. But many drowned in an attempt to escape the fire's grasp, and others perished from hypothermia as they waited for hours in the cold Peshtigo River. By the end of the fire, there was only one building still standing in the city. The death count including Peshtigo and surrounding areas was estimated somewhere between 1,200 and 2,400.



Marking 150 Years

The city of Peshtigo remains, 150 years later, with an estimated population of 3,400. A commemoration of the fire's 150th anniversary took place Sept. 24-26. Peshtigo Mayor Cathi Malke recalls a recent interview she gave regarding the upcoming anniversary, with the interviewer being perplexed when she referred to the commemorative event as a "celebration." Why the positive spin on something so horrific?

"I told him that we want to use this time to celebrate our city and how we moved forward," Malke said. "But we will never forget the lives that were lost, because that was our groundwork. Many of the survivors' descendants still live in the area. "So, I call this a celebration not to demean the people who lost their lives, but the exact opposite. We grew from it, and our people have been strong enough to keep moving forward."

Malke said she has learned through her travels that the Peshtigo Fire is largely unknown to most Americans, giving the city's history a higher level of significance to those in Peshtigo. "To me, it's our legacy, our history," Malke said. "In Peshtigo, you know your neighbors, and they are always willing to help as we did those many years ago."

Firefighting, Then and Now

Advances in fighting fires - especially wildfires, which can be a threat no matter what the time period - have come a long way since the Peshtigo Fire. At the time, the Peshtigo Fire Co. had a single horse-drawn steam pumper to protect houses and small factories. It stood no

match for the apocalyptic fire of that fateful October day (example below). Today's firefighting technology and communications are far different, of course. But despite all of the advances, fire suppression itself is approached much the same as in 1871, said Catherine Koele, wildfire prevention specialist for the DNR.



"I think the one thing that hasn't changed is that we continue to fight fire from the ground," Koele said. "That is our primary resource and our way to attack a fire directly. "We have used air suppression to help detect fire and coordinate resources on the ground, but ultimately, the one thing that hasn't changed is our ability to fight fire with boots on the ground."

At the time of the Peshtigo Fire, the most prominent method of communication was through telegraph wires. Unfortunately for those in town, unaware of the unbridled flames blazing toward them, the lines were all charred long before any call for help could be made. It wasn't until about a week later that news spread about the unthinkable tragedy that had occurred in Peshtigo.

Today, communication plays a pivotal role in helping to suppress a fire, with modern forms of communication used to keep the public informed and monitor reports of fires from communities around the state. "Social media has allowed us instant ability to connect with the media and public," Koele said. "We still use radio and TV to run a full gamut of methods to connect with the public. The biggest message here is that people need to be aware of when it's fire season and know what to do in the event of an evacuation."

Learn More

The Peshtigo Fire Museum preserves the history of the tragic 1871 Peshtigo Fire. The museum, run by the Peshtigo Historical Society, is located at 400 Oconto Ave., Peshtigo, in a building that was the first church rebuilt in Peshtigo after the fire. Normal museum hours are 10 a.m. to 4 p.m., Memorial Day weekend through the anniversary of the fire, Oct. 8. For information about the Peshtigo Fire, visit the museum website at www.peshtigofiremuseum.com/.

Peshtigo Historical Days, a three-day event commemorating the sesquicentennial of the Peshtigo Fire, is usually held around the end of September at Badger Park in Peshtigo. History-related events blend with family-friendly activities to remember the fire and celebrate how Peshtigo "rebuilt from the ashes" into the vibrant community of today. For information on Peshtigo, see <https://ci.peshtigo.wi.us/>.

Other resources include:

- <https://www.weather.gov/grb/peshtigofire> - National Weather Service
- <https://www.wisconsinhistory.org/Records/Article/CS1750> - WI Historical Society
- <https://www.fireengineering.com/fire-prevention-protection/remembering-the-great-peshtigo-fire-of-1871/#gref>



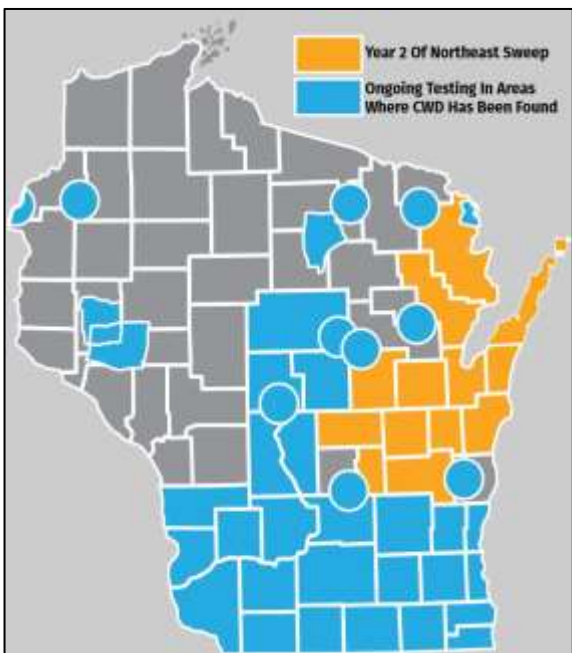
DNR To Monitor CWD Samples in Northeastern Counties, Other Focus Areas

<https://dnr.wisconsin.gov/newsroom/release/49706>



The Wisconsin Department of Natural Resources (DNR) is asking deer hunters to help monitor chronic wasting disease (CWD) in northeast Wisconsin and surrounding counties.

This year's monitoring will complete multi-year, statewide CWD sampling efforts that began in 2018. The [northeast counties included in this effort](#) are Brown, Calumet, Door, Green Lake, Fond du Lac, Kewaunee, Manitowoc, Marinette, Oconto, Outagamie, Waupaca, Waushara and Winnebago.



The DNR has made CWD testing available and accessible to every hunter in the state by offering free testing and various options to make the sample drop-off process fast and convenient for hunters. [Active CWD sampling efforts are currently underway in counties where CWD has already been found.](#)

"We especially encourage hunters in northeast Wisconsin and around our other CWD surveillance areas to get their adult deer tested this season," said Amanda Kamps, DNR Wildlife Health Conservation Specialist. "Each test result helps us better understand CWD distribution."



Deer with CWD

The DNR offers four easy ways to submit a sample and [an online map to find sampling locations near you](#). Be sure to check the map of sampling locations regularly to see additional options as they become available:

- **Self-service kiosks open 24/7** - Kiosks have supplies for hunters to drop off

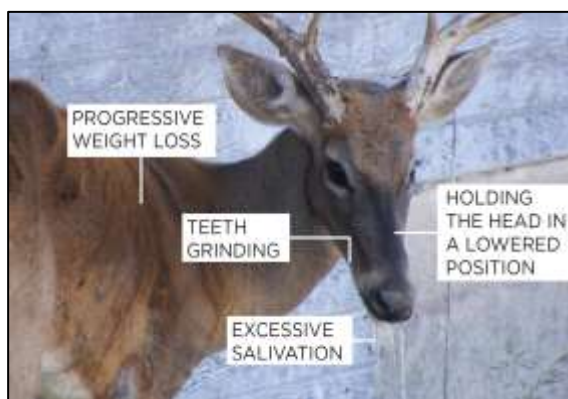
their adult deer's head with 5 inches of neck attached for testing. Check the DNR's CWD sampling page before your hunt to find a location near you.

- **In-person with cooperating meat processors, taxidermists and other businesses** - Visit a cooperating partner for assistance with CWD testing.
- **At-home lymph node sampling** - Hunters can extract the retropharyngeal lymph nodes using an instruction kit provided by the DNR and return them to the DNR for testing. [Contact](#) your local wildlife biologist to get a kit.
- **By appointment with local DNR staff** - Hunters can contact their local wildlife biologist to schedule an in-person appointment.



Example of a self-service CWD kiosk

Hunters are encouraged to use the [DNR's new online form](#) to register your deer, find a CWD sampling location and enter information on your harvest. The online form automatically fills in your name, contact information, customer ID number and harvest registration number and includes an interactive map to drop a pin on your harvest location. Submitted registration information is available in your Go Wild harvest history.



CWD Symptoms

For more information, visit the DNR's [CWD webpage](#) or Amanda Kamps, DNR Wildlife Health Conservation Specialist - Amanda.Kamps@wisconsin.gov or 608-712-5280.



UW-Green Bay Lifelong Learning Institute Utilizes T.O.A.D. Programs



LLI participants in the demonstration gardens at the Harmony Arboretum, Peshtigo, in early September

Marinette County Land Information Department's environmental education programs have a new partner in the UWGB Lifelong Learning Institute at the Marinette Campus. The program offers a wide variety of non-credit classes and other personal enrichment activities to its 1000+ members, all of whom enjoy learning for its own sake. There are no tests, no papers, no grades, no academic or age prerequisites.

LLI functions essentially as a kind of "health club for the mind," providing its members with multiple and varied opportunities to exercise their minds and bodies, pursue their creative interests, and meet new people and make new friends. There are also volunteer opportunities.

All classes are taught by unpaid volunteer presenters and local partners. The program is sponsored by UW-Green Bay's Division of Continuing Education and Community Engagement. Other LLI program locations include Green Bay, Sheboygan and Manitowoc.



Photo from www.facebook.com/uwgbmarinette/

Recent local programs include Tree ID (above) held at the Marinette campus, and a tour of the Harmony Arboretum & Demonstration Gardens in Peshtigo. Presenters at Harmony were Northern Lights Master Gardener Linda Warren, Wild Ones Member Adrian Konell, and Anne Bartels, Information & Education Specialist of the Land Information Department.

In spring 2022, Anne Bartels will present *Nocturnal Animals of Wisconsin*, *Astronomy for Beginning Stargazers*, and *Water Conservation & Pollution Prevention* (programs will be held at the UWGB-Marquette campus).

For more information about the program or to check availability for fall semester classes, visit <https://www.uwgb.edu/lifelonglearning-institute>, or call 920-465-2356. You can also email lli@uwgb.edu or visit them on Facebook at www.fb.com/uwgb.lli.



Fall Backyard Birding Checklist: 13 Tips to Attract More Birds This Autumn

www.birdsandblooms.com/birding/attracting-birds/fall-birding-checklist/



Every season brings tasks that backyard birders can do to encourage more birds to visit. Read on for easy projects you can do before the snow starts falling to ensure great bird-watching in the months ahead.

1. Double the number of seed and [suet feeders](#) around your yard, as birds are currently flocking and there are many more mouths to feed.
2. Switch to hopper-style feeders, which are more practical than tray feeders at times when the moisture from rain and snow can ruin food. Tube feeders work well in inclement weather, too. (Psst - these are the 10 [types of bird feeders](#) you need in your backyard.)



3. Stockpile all types of sunflower seeds. These offer the greatest amount of energy for the birds of fall and winter.
4. Check the condition of feeders and squirrel baffles to make sure they will make it through the winter. Replace the ones you can't repair.
5. In the North, switch exclusively to suet and a few [types of birdseed](#), as the birds that enjoy fruit and insects have gone south for the winter.



6. After the last of the [orioles](#) and hummingbirds have passed through your area, remove and [clean all sugar-water feeders](#).
7. Protect stored bird food by securing it in waterproof garbage cans. Place bricks or bungee

cords on top of lids to keep out raccoons and squirrels.



8. Birds that are migrating south need water to both refresh themselves and keep their feathers in good shape for smoother flying.

9. Shut down [birdbaths](#) and ponds after the last migrants have passed through, unless you live in a frost-free zone. Otherwise, an electric birdbath heater may be used to attract thirsty birds.



10. Take down most [birdhouses](#). To remove parasites and insects, clean with a solution of soap, water and 10 percent bleach.



11. Leave up a couple of birdhouses to serve as weatherproof roosting sites for [chickadees](#), bluebirds and [woodpeckers](#).
12. During your [fall yard cleanup](#), collect woody plant clippings to create brush piles. These will protect ground birds and other wildlife.
13. Plant a few [evergreen trees](#) and/or shrubs around feeders to help birds hide from predators, and to offer security during cold winter nights.

- <https://dnr.wisconsin.gov/topic/wildlife/abitat/birding.html>
- <https://www.audubon.org/news/birding-wisconsin>
- <https://www.birdwatchersdigest.com/bwdsite/explore/regions/midwest/wisconsin/wisconsin-birding-season-fall.php>



How (and How Often) to Clean Bird Feeders & Making the Most of Fall Birding in the Great Lakes

www.birdsandblooms.com/birding/attracting-birds/feeding-birds/how-to-clean-bird-feeders/ & <https://gl.audubon.org/news/fall-back-birding>



A clean bird feeder is essential, and it’s definitely something to keep in mind when you’re [buying](#) or [building](#) a new one. In addition to how attractive the feeder looks, how sturdy it feels, and how much seed it holds, consider how to clean bird feeders.

When birds eating at feeders come in close proximity, the spread of [bird disease](#) is more likely. Summer heat and rains can cause seed and suet to spoil or mold much quicker, especially if your feeders are in the sun. Accumulated bird droppings also create an unhealthy environment. These are the [best bird feeders and birdseed for cardinals](#).



Take your feeders down regularly for cleaning and maintenance.

How to Clean Bird Feeders

It’s important to keep feeders and the surrounding area clean to avoid spreading illness. Clean your seed and [suet feeders](#) thoroughly every few weeks (and even more often in hot and humid weather). Remove and discard any leftover seed.

Spray and wipe feeders with a 10 percent bleach solution (one part bleach to nine parts water) and a stiff brush. Rinse well with clean water. Allow feeders to dry completely before filling and putting them back up. (Check out the [10 types of feeders](#) you need in your backyard.)

Mild days in early spring are the perfect time to assess the condition of feeders that have been outside all winter. Check for cracks, broken perches or damaged [baffles](#). Repair or replace them if necessary. It’s also the perfect time to give feeders a deep cleaning.

Once or twice a season, take them down and give them a full wash with hot water and soap. Or run them through the dishwasher. Many birds [feed on the ground](#), so be sure to sweep up the husks and dropped seeds under and around feeders.

Making the most of fall birding in the Great Lakes

Fall migration is truly a magical time as waterfowl, waterbirds, shorebirds, songbirds, and raptors pass through the Great Lakes region on their trips south to their wintering grounds. The Great Lakes region lies at the intersection of the Mississippi and Atlantic flyways, two migration “superhighways,” which bring over 380 bird species through the region each fall!



[Great Lakes coastal and inland wetlands](#) act as important resting and refueling zones for migratory birds and are one of the best habitats to visit during fall migration. Wetlands provide birds with water, food, and shelter during their long migration journeys and as such, many birds follow Great Lakes coastlines on their journeys south.

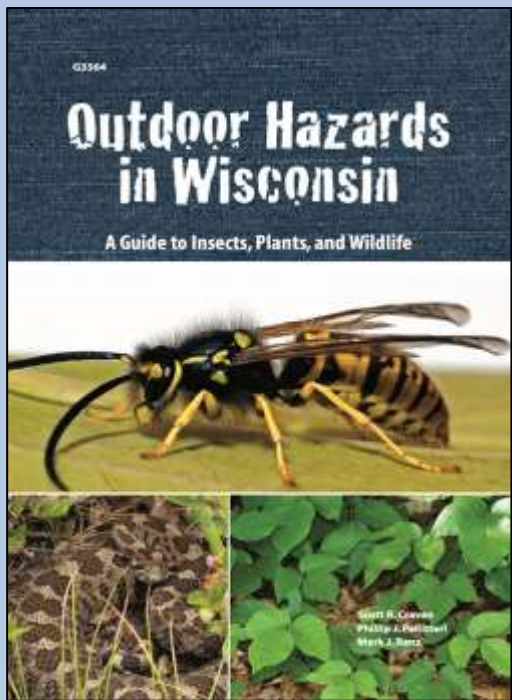
Keeping an eye on the weather can help you prepare for your next fall birding trip. Wind and other weather events can help you predict when large movements of birds will migrate through the region. Cold fronts are the most important weather feature to track. Storms often precede cold fronts, which cause migrants to hunker down until the poor weather passes. This often results in an awe-inspiring migratory movement known as a “fall-out.”

October: Diving ducks arrive this month, like [Common Goldeneye](#), [Long-tailed Duck](#), and [Canvasback](#), as well as our northern finches like [Dark-eyed Juncos](#) and [Pine Siskins](#). If we experience an “[irruption](#)” year, we may even see some [Evening Grosbeaks](#) and crossbills. Northern breeders, such as [Ruby-crowned](#) and [Golden-crowned Kinglets](#), [Brown Creepers](#), [American Pipits](#), and [Horned Larks](#), start to move south. [Sandhill Cranes](#) start to migrate in great numbers.

Warbler and thrush migration starts to wind down. Warblers still on the move this month include Blackpoll Warbler, Black-throated Blue Warbler, Nashville Warbler, Orange-crowned Warbler, which peak this month, and Yellow-rumped Warbler. Hawk diversity increases.

November: Diving ducks, sea ducks, such as eiders and Long-tailed Ducks, rare gulls like [Iceland Gull](#), [Sabine’s Gull](#), [Franklin’s Gull](#), and sparrows continue to move through the region. Lapland Longspurs and Snow Buntings travel in peak numbers. Northern owls, such as [Great Gray Owl](#), [Snowy Owl](#), [Northern Hawk-Owl](#) and [Boreal Owl](#), make their way into the UP in Michigan. [Rough-legged Hawks](#) and [Golden Eagles](#) also move through the region in decent numbers.

Outdoor Hazards in Wisconsin: A Guide to Insects, Plants and Wildlife



We all know about autumn and increased wasp activity in Wisconsin’s outdoors, but what else is out there to ‘bug’ us throughout the year? Download this excellent guide from UW-Madison Extension so you’re prepared for all the “Outdoor Hazards in Wisconsin”.

Published by the University of Wisconsin-Madison Division of Extension, [this guide](#) (link to download) will help you recognize, avoid and handle potential problems caused by wildlife, insects or plants.

Contents:

- Amphibians (salamanders, toads)
- Reptiles (turtles, snakes)
- Birds (defending territory, handling birds)
- Mammals (short-tailed shrews, bats, skunks, porcupines, coyotes, gray wolves, deer, black bears)
- Stinging insects (bees and wasps)
- Blood-feeding insects (mosquitoes, deerflies and horseflies, blackflies, biting midges, ticks, chiggers)
- Plants that are poisonous when ingested (poison hemlock, spotted water hemlock, bittersweet nightshade, black nightshade, jimsonweed)
- Plants that are poisonous on contact (poison ivy, poison sumac, wild parsnip, stinging nettle)
- Plants that cause hay fever (common ragweed, giant ragweed)
- Thorny, barbed plants (bull thistle, beggarticks, burdock, cocklebur, sandbur)

Wisconsin’s bountiful natural resources - clear lakes and rivers, forests, rolling hills, and interesting land-forms - make the state an ideal place for outdoor recreation. When you hike, camp, hunt, fish, or enjoy other outdoor activities, you may encounter animals, insects, or plants that are capable of causing problems. While wild animals, swarms of biting insects, and poisonous plants do exist in Wisconsin, the risk of meeting them is actually quite low. In most cases, you can avoid these natural hazards altogether or handle them with little difficulty. Using common sense and having a healthy respect for Wisconsin’s wild creatures and plants will go a long way toward maximizing your enjoyment of the outdoors. This guide will help you recognize, avoid, and handle potential problems caused by wildlife, insects, or plants.





CAMPERS CORNER

Marinette County Parks

The closing dates are 'closing' in on us. But just because we are 'closed' that doesn't mean you have to stop exploring. We just don't upkeep the facility or plow for snow. Please adventure at your own risk. Your annual sticker pass is good through December 31, 2021.

MARINETTE COUNTY CLOSING DAY:

October 15..... Twin Bridge Park and Lake Noquebay Beach House.

Potable Water Towers at Morgan and Goodman Parks

November 1..... All Lodges

November 30.....All Parks and Cabins

*some parks may close earlier due to inclement weather

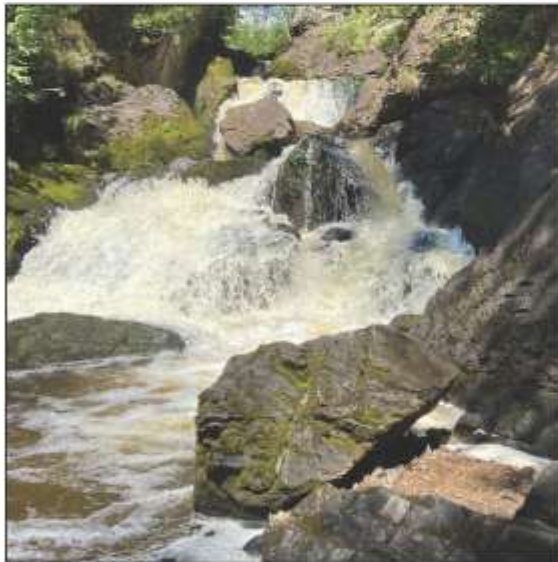
Lake Noquebay Park | Crivitz, WI



Twin Bridge Park & Campground | Crivitz, WI



Long Slide Falls | Niagara, WI



Dave's Falls | Amberg, WI



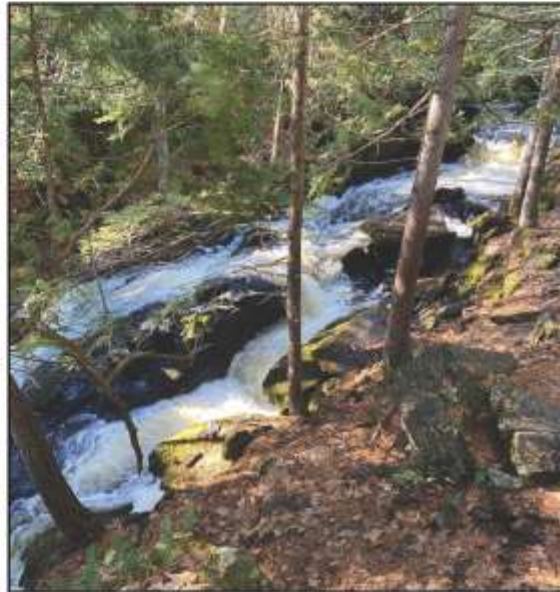
12 Foot Falls | Dunbar, WI



Thunder Mountain Overlook
Crivitz, WI



Smalley Falls | Niagara, WI



McClintock Park & Campground | Athelstane, WI



Follow us on Facebook
Marinette County Parks and Campgrounds



Follow us on Instagram
@marinettecountyparksandcamping



Contact the Parks office at 715-732-7531 or visit
www.marinettecounty.com/departments/parks/general-information/campgrounds-and-parks/

Take Action to Reduce Algae Blooms in Wisconsin Waterbodies

<https://dnr.wisconsin.gov/newsroom/release/49086>



The Wisconsin Department of Natural Resources (DNR) reminds Wisconsinites of blue-green algae risks and simple steps to help reduce algae blooms.

Blue-green algae, or *cyanobacteria*, are photosynthetic bacteria often called "pond scum." Blue-green algae are most often green but can also be blue, tan, reddish-purple or brown. Blue-green algae generally grow in lakes, ponds and slow-moving streams when the water is warm and enriched with nutrients like phosphorus or nitrogen.

When environmental conditions are just right, blue-green algae can increase in number. Most species are buoyant and will float to the surface, where they form scum layers or floating mats known as a "blue-green algae bloom." In Wisconsin, blue-green algae blooms generally occur between mid-June and late September, although in rare instances, blooms have been observed in winter, even under the ice.

Concerns associated with blue-green algae include discolored water, reduced light penetration, taste and odor problems, dissolved oxygen depletion during die-off and toxin production. In addition to environmental concerns, contact with blue-green algae blooms can be dangerous for humans and pets. To keep loved ones safe, the DNR urges, **"When in doubt, stay out!"**



Stop algae at the source

There are no quick or easy remedies to control blue-green algae once they appear in a lake or pond. Reducing the amount of nutrients that wash into Wisconsin lakes and ponds will eventually reduce the frequency and intensity of blue-green algae blooms.

Still, scientists warn it may take a long time and a lot of community involvement to change the nutrient concentrations in a water body effectively. This is because there may still be significant amounts of nutrients in bottom sediment continuing to serve as food for the blue-green algae.

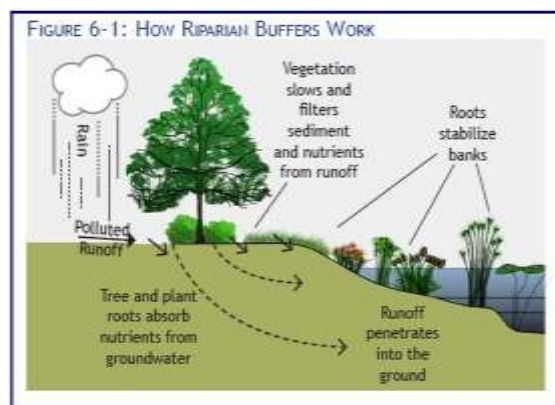
Regulatory agencies like the Wisconsin DNR and Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) work with communities around the state to reduce stormwater runoff and encourage agricultural practices that reduce soil erosion while maintaining high crop yields and promoting soil health.

Locally, landowners and interested citizens can help minimize problems associated with algal blooms by working together with partners in their watershed to reduce the amount of nutrients that reach nearby lakes, streams and ponds.



Citizens can reduce nutrient concentrations by promoting the following practices in their communities:

- Use lawn fertilizers only where truly needed. Wisconsin has prohibited the use of lawn fertilizers containing phosphorus (except for establishing new lawns) since 2010.
- Prevent yard debris (e.g., leaves, grass clippings, etc.) from washing into storm drains.
- Support local ordinances that require silt curtains for residential and commercial construction sites.
- [Plant and maintain vegetative buffer strips along shorelines of lakes, ponds and streams.](#) Note: Native plants are much more effective at filtering runoff than the typical grass species found on residential lawns.



- [Test soil with resources from The University of Wisconsin Division of Extension.](#)

The public is encouraged to report significant blue-green algae blooms to the DNR at DNRHABS@wisconsin.gov. Please include the location of the bloom, the name of the water body, nearest town, county, the size and duration of the bloom and overall and close-up photographs for verification. The DNR is unable to test all reported blooms.

[For more information on blue-green algae, including symptoms of exposure and environmental concerns, visit the DNR Blue-Green Algae webpage.](#) More information is also available [via the Wisconsin Department of Health Services.](#)

Related Links

[Beach Closings and Advisories Map](#)
[Beach Advisory Reports](#)
[Beach Safety Tips](#)
[Maps of Great Lakes Beaches](#)
[Search for Beaches on Inland Lakes](#)
[Wisconsin's Great Lakes](#)



Tricks at Twin Bridge Campground!

On Saturday, October 2nd, campers at Twin Bridge County Park had fun with costumes, a 'nocturnal animals hands-on nature table', trick or treating, and campsite decorating! The Parks Department held the 2nd annual 'Tricks at Twin Bridge' on the 2nd, and the next weekend (October 9) the 'Monsters at Morgan Park' event will be held. Campsites are fully booked for this year, but plan ahead for 2022's October events!

Below are some photos from the nature table area and some of the site decorations. First place went to a clown-infested site – including Pennywise the Clown; second place was a 'monster Packers party'; and third place was an unfortunate campsite that encountered some cannibals!



Above – the nocturnal animals table with a fun dinosaur host (Anne Bartels, Land Information Dept.); and below, Allyson Bickel of Parks and Anne Bartels take a selfie



See page 9 for Parks contact information if you have questions or about booking for 2022.



How to Mulch and Avoid Mistakes

www.gardendesign.com/how-to/mulch.html



Why should we mulch and what is the right mulch and method of application?

The Good Mulch:

1. Stabilizes soils and prevents erosion.
2. Helps soils retain moisture for plant use.
3. Improves soil structure and quality over time, if properly applied.
4. Looks great (sometimes).
5. Improves biological activity and mixes organic materials into soils.
6. Prevents weed growth.
7. Can be an effective herbicide in place of chemicals, cutting, mowing etc.

Types of Good Mulch:

1. Bark Mulch:

It stays loose and does not bind. Bark mulch has a nice dark color and is a great background for plants and it does not fade over time. Bark mulch cultivates nicely into the soil and improves soil structure and drainage. It is usually innate and does not require nitrates to decompose. It is readily available and comes in easily handled 1 to 3 cubic foot bags in a variety of sizes from 4" to 3/8".



2. Soil Conditioner:

This is usually the 3/8" and smaller screenings left over from sorting bark mulch. It is great for top-dressing beds and used as a component in planting mixes.

3. Straw Mulch:

This can be either salt hay or pine needles, and more commonly used in the southern part of the United States. Straw mulch is available in easily handled lightweight bales and it has a nice color and natural look. Salt hay (also known as salt marsh hay) is hay from salt marshes and spreads through rhizomes rather than seeds, so it eliminates the risk of contaminating the soil with weed seeds.

4. Sweet Peet:

This is the brand name of a specific type of mulch that is a combination of mulch, agricultural manure, soil conditioner, and humus. Their website is sweetpeet.com.

5. Leaves and other organic matter:

Keep some leaves in the beds. Plants shed leaves for a variety of reasons including as a way to feed and protect themselves. But for some reason, we spend too much time and energy removing them. I'll never understand the fascination to keep our garden like our bathrooms. It's okay to be neat, but don't sterilize you garden by removing all the leaves.



Above – fallen leaves as mulch; below, pine needle mulch.



Find ways to hide them in your garden beds. They will improve biological activity and, in many cases, it is much better than mulch. Go walk in the forest and uncover the duff layer (leaf layer) and take a look at what's happening! It's alive!

6. Living Mulch:

Ground cover plants like ivy, *Pachysandra*, and *Liriope* are great. It's better to invest in this than something that needs replacing every season.

7. Stone Mulch:

This is a durable and long-lasting mulch that is good for areas where much can easily be washed away by heavy rains or in commercial applications such as parking lot islands.

The Bad Mulch:

1. Too much mulch that is improperly applied in too thick of a layer kills plants and/or prevents proper growth.
2. Some mulch like hardwoods and shredded bark actually bind together, which prevents penetration of air and water.
3. Bad mulch reduces the biological activity in the soil. Where are the bugs and the worms in this mulch? If they can't live in it, how does a plant?
4. A badly chosen mulch can change the chemical composition of the soil. Mulch that is not fully decomposed draws nitrogen from the soil as it breaks down. Some mulch also leaches micronutrients, like magnesium, that are harmful to plants.
5. Mulch that is not clean and that contains garbage, weed seeds, or harmful pathogens.
6. Consider the cost of mulch. Determine what your annual mulch budget is and spend half on living mulches that will spread, reduce mulching, and increase plant material in the garden.

Types of Bad Mulches:

1. Wood Chips:

A by-product from arborists, this is essentially someone else's waste. It is best used if allowed to decompose for two to three years and mixed with other [garden compost](#) and organic fertilizers to aid in decomposition.

2. Double-ground hardwood mulch:

These are usually wood chips that are immediately processed as the byproduct of tree removal, dyed, and made available in bulk. It's not the worst if the goal is to prevent weed growth or to stabilize soils and prevent erosion. But do not use it within the drip line of the plants or apply it around stems and trunks.

3. Cedar Mulch:

Everybody loves it for the color and scent, but

it has many of the same negatives as other hardwood mulches, with a tendency to bind together and mat down.

4. Rubber Mulch:

It's just bad and really needs no explanation, so don't use it. It is sold as an environmental solution to reduce the mountains of discarded automobile tires in this country. Is it really a good environmental solution to grind up tires and put that in our gardens? No. Obviously.

5. Plastic sheeting and fabric weed barriers:

This should only be used on limited basis. It is best used for commercial purposes and for small scale jobs. It does prevent weed growth, but it is also unsightly and prevents water and air from entering the soil and therefore reduces biological activity.

6. Cocoa Shell Bark:

Bark or mulch made from cocoa shells contains the same substances as found in chocolate and can be highly toxic to dogs and cats.



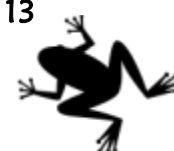
The Ugly Mulch:

1. Cone of Shame: This is when mulch is piled around trees and plant stems to make a cone (in photo below). It smothers the plant, looks horrible, and actually brings water away from the plant. Instead, use mulch to make a plant saucer just outside the drip line to keep water where the plant needs it.



2. Hot Stuff!: If you use mulch that is not fully decomposed (too green) or piled on too high, the decomposition process will generate heat - gardens literally will cook with green mulch.
3. Anaerobic (sour) Mulch: Mulch should normally smell like freshly cut wood or cultivated soil, but sometimes it develops a strong toxicity that can kill plants. This happens when organic material is not rotated or turned over enough. When this occurs, the process may become anaerobic and produce phytotoxic materials in small but toxic quantities.
4. Using mulch to improve the appearance of a garden or landscape instead of using plants. I often see commercial landscapers with little experience and training use mulch as a quick fix to make a garden look good. Great for their bottom line and profits, but a bad investment for homeowners.
5. Mulch that Binds: Most perennials and annuals need lots of air and the ability to spread to thrive. Over mulching or using the wrong mulch prevents good, productive growth when the mulch binds.

Continued on page 13



October Meteor Showers – Where & When to Look!

<https://earthsky.org/astronomy-essentials/earthskys-meteor-shower-guide/>,
<https://www.amsmeteors.org/meteor-showers/meteor-shower-calendar>,
<https://stardate.org/nightsky/meteors>

This month, watch the Draconid meteors at nightfall and early evening on October 8. You might catch some on the nights before and after, as well. Fortunately, the thin waxing crescent moon sets before nightfall. It won't hinder this year's Draconid shower.



This chart faces northward at nightfall in October. The Big Dipper sits low in the northwest. From the southern U.S. and comparable latitudes, in October, obstructions on your northern horizon might hide the Big Dipper from view. However, if you can spot it low in the sky, use the Big Dipper to star-hop to the star Polaris. Polaris marks the end star in the handle of the Little Dipper. Got all these stars? Then you should also be able to spot Eltanin and Rastaban, the Draconids' radiant point, high in the northwest sky at nightfall in early October. Draconid meteors radiate from near these stars, which are known as *the Dragon's Eyes*.

The radiant point for the Draconid meteor shower almost coincides with the head of the constellation Draco the Dragon in the northern sky. That's why the Draconids are best viewed from the Northern Hemisphere. The Draconid shower is a real oddity, in that the radiant point stands highest in the sky as darkness falls. That means that, unlike many meteor showers, more Draconids are likely to fly in the evening hours than in the morning hours after midnight.

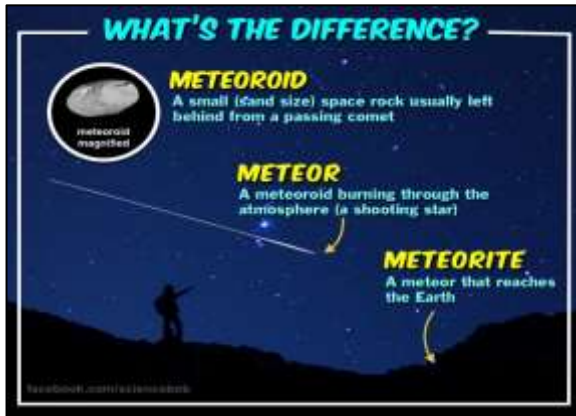


This shower is usually a sleeper, producing only a handful of languid meteors per hour in most years. But watch out if the Dragon awakes! In rare instances, fiery Draco has been known to spew forth many hundreds of meteors in a single hour.

October 21, 2021, before dawn, Orionids
Unfortunately a full moon accompanies 2021's Orionid shower. Try watching for these meteors in the wee hours before dawn on October 21. You won't escape the moon, though. On a dark, moonless night, the Orionids exhibit a maximum of about 10 to 20 meteors per hour.



The Orionid meteors are debris left behind by Comet Halley, arguably the most famous of all comets, which last visited Earth in 1986. This comet leaves debris in its wake that strikes Earth's atmosphere most fully around October 20-22, while Earth intersects the comet's orbit, as it does every year at this time. Particles shed by the comet slam into our upper atmosphere, where they vaporize at some 60 miles (100 km) above Earth's surface.



More meteors tend to fly after midnight, and the Orionids are typically at their best in the wee hours before dawn. These fast-moving meteors occasionally leave persistent trains. The Orionids sometimes produce bright fireballs, which might be able to overcome a moonlit glare. If you trace these meteors backward, they seem to radiate from the Club of the famous constellation Orion the Hunter, below.



Name	Date of Peak	Moon
Quadrantids	Night of January 2	In the sky during peak hours
Lyrids	Night of April 21	In the sky during peak hours
Eta Aquarids	Night of May 5	Sets before peak hours
Persoids	Nights of August 11, 12	Sets before peak hours
Draconids	Nights of October 7, 8	Out of view in evening
Orionids	Nights of October 20, 21	Sets before peak hours
Leonids	Night of November 16	Sets shortly before dawn
Geminids	Night of December 13	In view most of the night

Mulch, continued from page 12

Types of Ugly Mulches:

1. **Dyed Mulch:**
Ugh! Nothing takes away from the beauty of architecture, plants, or landscapes more than red- or orange-dyed mulch. Just don't do it.



2. **Plastic or Fabric:**
Bad for plant growth, but also unsightly in the long run and does not decompose or improve soil.

3. **Rubber Mulch:** JUST SAY NO!!!!

4. **Straw Hay:**
Used as a construction site soil stabilizer, straw made from barley, oats, rice, rye, and wheat hay have seed heads that will germinate and create a major weed problem.

In summary, using good mulch in moderation is the most effective application method. Combine mulch use with good garden design, practices, and know the makeup of your mulch and its origin.

Don't fall into the mulch trap as a quick fix to make your garden look good. Choose plants over mulch and get yourself a good cultivator to get rid of those weeds and massage the earth!

T.O.A.D. Fun at Camp Bird!

In September and early October, Anne Bartels, Information & Education Specialist, was at Camp Bird for Coleman & Peshtigo 6th graders. Students had fun catching & identifying aquatic invertebrates, learning about constellations and astronomy, and getting a close look at Wisconsin mammals species with the 'Skins & Skulls' program.



Above – Skins & Skulls in the rec hall; below, a dobsonfly larva gets a close-up. (He said his left was the better side....)



Fun Fall Crafts - Shrunken Apple 'Heads' & Leaf Printing

<https://magicalchildhood.com/wildkids/magazine/202110Oct.pdf> &
<https://www.eekwi.org/activities/arts-crafts/leaf-printing>



Here's a fun little nature craft just in time for Halloween. All you need are some apples (we used imperfect ones off a generous neighbor's tree), salt and lemon juice.

First peel your apples. You can leave a little on the top and bottom like a little hat and scarf. Then get some carving tools (a chopstick, grapefruit spoon or pen knife all work well, depending on skill level). You can trace your design first with a pen or pencil, if you like.

Carve out a face, making sure to make each feature large, since they will shrink up and collapse somewhat.



Then mix up some salt and lemon juice and apply it all over, especially in the parts you've carved out. This will prevent mold and also protect them from getting too brown. Salt has been used for thousands of years to preserve foods and other things. Acids like lemon juice slow oxidation (browning caused by a chemical reaction when substances react with oxygen).

Now put your apple heads somewhere to dry. Choose a location where you can watch them and keep up with how they change.



Leaf Printing

These are the materials you will need: different leaves, paint, brushes, fabric paint, paper or fabric, and newspaper.



Collect different kinds of leaves. Try to collect leaves that are clean - they'll work better.



Squirt fabric paint into a small container. Dip brushes in paint. Paint one side of the leaf. The imprint will show up better if you paint the bottom side of the leaf where the veins stick out more.



Put newspaper under the fabric or between the fabric layers if you're painting on a t-shirt. Lay the painted leaf on the fabric (cotton works well) or paper and apply equal pressure to all parts of the leaf. This method is called *pressure printing*. With a little practice you'll discover how hard to press the leaf and how much paint to apply.

A rolling pin sometimes makes this process easier. A closet rod, cut into 12-inch lengths makes an inexpensive set of rolling pins. You can also use a caress printing technique. Lay your printed leaf down, paint side up, and lay the material to be printed on top of the leaf. In one motion firmly press down on the material and leaf.

If you're printing on fabric, you'll need to waterproof your design. Once it's dry, you can heat-set or waterproof your design by putting it in a dryer on low for 10-15 minutes. Ironing also works. Read the paint manufacturer's directions for more information.

After your print dries, show off your work!



Meet the Chipper Chipmunk!

<https://www.facebook.com/USFWS> -
 U.S. Fish and Wildlife Service



Fall is officially here and many animals are spending time bulking up or collecting food for the winter. This eastern chipmunk was spotted with a full load! In the winter, these chipmunks spend much of their time resting, but don't truly hibernate.

Chipmunks, (genus *Tamias*), are any of 25 species of small, striped, terrestrial squirrels with large internal cheek pouches used for transporting food. They have prominent eyes and ears, a furry tail, and delicate claws. All are active only during the day, and all but one are North American, occurring from southern Canada to west-central Mexico.

- Chipmunks have cheek pouches that can enlarge to the size 3 times bigger than their heads.
- During hibernation, chipmunks can seem like they are dead. Their heart rates can drop from 350 beats per minute to around 4 beats per minute.
- Chipmunks construct extensive burrows which can be more than 11 feet in length with several well-concealed entrances.



- Chipmunks are considered omnivorous animals. They eat various kinds of foods such as buds, small frogs, bird eggs, worms, arthropods, fungi, insect, shoots, grass, fruits, nuts, and seeds.
- Before the winter season comes, chipmunks will gather and store the nonperishable foods. They collect them at the beginning of autumn season.
- The foods that they gather will be kept inside the burrows. The chipmunk will stay here until the end of spring season.

GET THE KIDS OUTSIDE

FUN FACT FRIDAY

CHIPMUNKS

- Chipmunks can gather up to 165 acorns in a single day. To temporarily store their food, they use their cheek pouches, which can expand up to three times the size of their head.
- Similar to their squirrel cousins, some chipmunks are scatter hoarders, hiding their food in thousands of different caches. Others are larder hoarders, hiding their stashes in a 'larder' in their burrow.
- Most chipmunks live in underground burrows, although some make their nests in logs or bushes.

